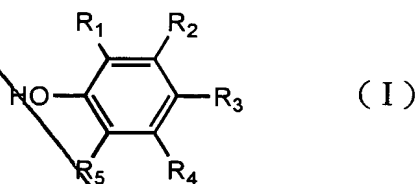
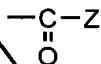


Pub B1
What is claimed is:

1. A molecular compound containing, as a constituent, a phenol derivative represented by Formula (I)

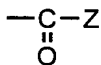


[wherein R₁ and R₅ are, same or different, groups selected from hydrogen, halogen, alkyl having 1 to 4 carbons, alkenyl having 2 to 4 carbons, alkoxy having 1 to 4 carbons, hydroxyl or



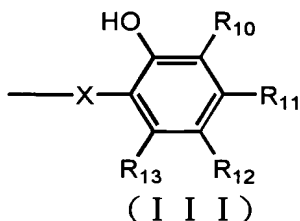
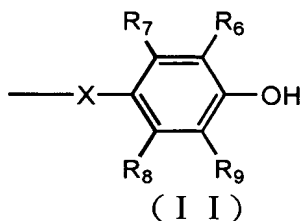
(wherein Y and Z are alkyl having 1 to 8 carbons, alkenyl having 2 to 8 carbons, alkoxy having 1 to 6 carbons, hydroxyl, optionally substituted amino, optionally substituted cycloalkyl, optionally substituted phenyl or optionally substituted aralkyl);

R₂ and R₄ are, same or different, hydrogen, halogen, alkyl having 1 to 4 carbons, alkenyl having 2 to 4 carbons, alkoxy having 1 to 4 carbons or hydroxyl, but they are groups selected from hydrogen, halogen, alkyl having 1 to 4 carbons, alkenyl having 2 to 4 carbons, alkoxy having 1 to 4 carbons, hydroxyl or

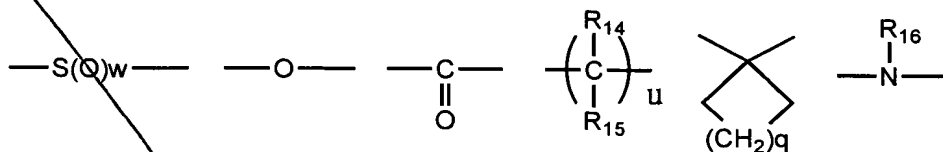


(wherein Y and Z are as defined above), in case R₁, R₃ or R₅ is alkoxy having 1 to 4 carbons or hydroxyl;

R₃ is hydrogen, halogen, alkyl having 1 to 4 carbons, alkenyl having 2 to 4 carbons, alkoxy having 1 to 4 carbons, hydroxyl, Formula (II) or Formula (III)



{wherein X is



(wherein w is 0, 1 or 2; u is 0 or 1; q is 0 to 4; R₁₄ and R₁₅ are, same or different, hydrogen, halogen, alkyl having 1 to 4 carbons, alkenyl having 2 to 4 carbons, alkoxy having 1 to 4 carbons, hydroxyl, optionally substituted phenyl or optionally substituted aralkyl; R₁₆ is hydrogen, alkyl having 1 to 4 carbons, alkenyl having 2 to 4 carbons, alkoxy having 1 to 4 carbons, hydroxyl, optionally substituted phenyl or optionally substituted aralkyl);

R₆, R₉ and R₁₀ are, same or different, groups selected from hydrogen, halogen, alkyl having 1 to 4 carbons, alkenyl having 2 to 4 carbons, alkoxy having 1 to 4 carbons, hydroxyl, or



(wherein Y and Z are as defined above);

R₇, R₈, R₁₁ and R₁₃ are, same or different, hydrogen, halogen, alkyl having 1 to 4 carbons, alkenyl having 2 to 4 carbons, alkoxy having 1 to 4 carbons or hydroxyl, but R₁₁ is a group selected from hydrogen, halogen, alkyl having 1 to 4 carbons, alkenyl having 2 to 4 carbons, alkoxy having 1 to 4 carbons, hydroxyl or

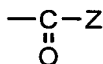


(wherein Y and Z are as defined above) in case R₁₂ is alkoxy having 1 to 4 carbons or hydroxyl;

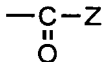
R₁₂ is a group selected from hydrogen, halogen, alkyl having 1 to 4 carbons, alkenyl having 2 to 4 carbons, alkoxy having 1 to 4 carbons, hydroxyl or



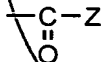
(wherein Y and Z are as defined above)}, or



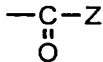
(wherein Y and Z are as defined above), or
when R_3 is of Formula (II), one of R_1 , R_5 , R_6 and R_9 is a group represented by



(wherein Y and Z are as defined above)
when R_3 is of Formula (III), at least one of R_1 , R_5 and R_{10} is a group represented by

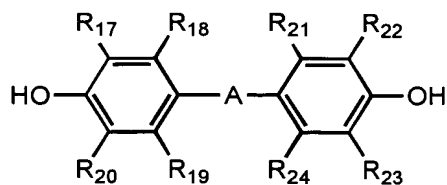


(wherein Y and Z are as defined above), and
when R_3 is a group other than Formula (II) or (III), either R_1 or R_5 is a group represented by



(wherein Y and Z are as defined above)].

2. A molecular compound containing, as a constituent, a phenol derivative represented by Formula (IV)

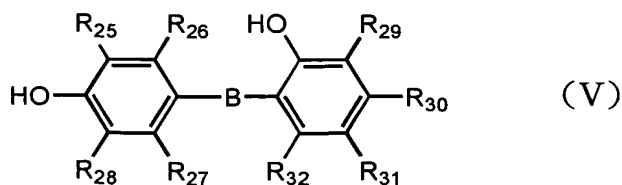


(IV)

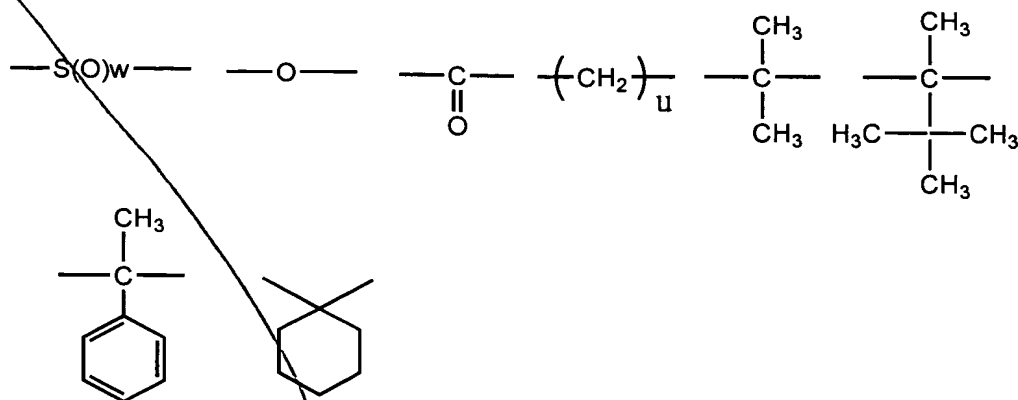
[wherein A is a group selected from

$$\text{---SO}_2\text{---Y} \qquad \text{---}\overset{\text{O}}{\underset{\text{O}}{\underset{\text{O}}{\text{C}}}}\text{---Z}$$

3. A molecular compound containing, as a constituent, a phenol derivative represented by Formula (V)



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(wherein w is 0, 1 or 2 and u is 0 or 1); R_{26} , R_{27} , R_{30} and R_{32} are, same or different, hydrogen, halogen, alkyl having 1 to 4 carbons or alkenyl having 2 to 4 carbons; R_{25} , R_{28} , R_{29} and R_{31} are, same or different, hydrogen, halogen, alkyl having 1 to 4 carbons, alkenyl having 2 to 4 carbons, alkoxy having 1 to 4 carbons or



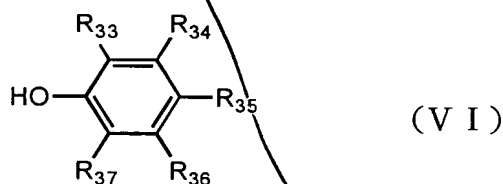
(wherein Y and Z are alkyl having 1 to 6 carbons, alkenyl having 2 to 6 carbons, cyclohexyl which may have alkyl having 1 to 4 carbons or alkenyl having 2 to 4 carbons or alkoxy having 1 to 4 carbons or hydroxyl or halogen, cyclopentyl which may have alkyl having 1 to 4 carbons or alkenyl having 2 to 4 carbons or alkoxy having 1 to 4 carbons or hydroxyl or halogen, phenyl which may have alkyl having 1 to 4 carbons or alkenyl having 2 to 4 carbons or alkoxy having 1 to 4 carbons or halogen, benzyl which may have alkyl having 1 to 4 carbons or alkenyl having 2 to 4 carbons or alkoxy having 1 to 4 carbons or hydroxyl or halogen, phenethyl which may have alkyl having 1 to 4 carbons or alkenyl having 2 to 4 carbons or alkoxy having 1 to 4 carbons or hydroxyl or halogen, α -methylbenzyl which may have alkyl having 1 to 4 carbons or alkenyl having 2 to 4 carbons or alkoxy having 1 to 4 carbons or hydroxyl or halogen, or naphthyl which may have alkyl having 1 to 4 carbons or alkenyl having 2 to 4 carbons or alkoxy having 1 to 4 carbons or hydroxyl or halogen), and at least one of R_{25} , R_{28} and R_{29} is



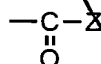
(wherein Y and Z are alkyl having 1 to 6 carbons, alkenyl having 2 to 6 carbons,

cyclohexyl which may have alkyl having 1 to 4 carbons or alkenyl having 2 to 4 carbons or alkoxy having 1 to 4 carbons or hydroxyl or halogen, cyclopentyl which may have alkyl having 1 to 4 carbons or alkenyl having 2 to 4 carbons or alkoxy having 1 to 4 carbons or hydroxyl or halogen, phenyl which may have alkyl having 1 to 4 carbons or alkenyl having 2 to 4 carbons or alkoxy having 1 to 4 carbons or halogen, benzyl which may have alkyl having 1 to 4 carbons or alkenyl having 2 to 4 carbons or alkoxy having 1 to 4 carbons or hydroxyl or halogen, phenethyl which may have alkyl having 1 to 4 carbons or alkenyl having 2 to 4 carbons or alkoxy having 1 to 4 carbons or hydroxyl or halogen, α -methylbenzyl which may have alkyl having 1 to 4 carbons or alkenyl having 2 to 4 carbons or alkoxy having 1 to 4 carbons or hydroxyl or halogen, or naphthyl which may have alkyl having 1 to 4 carbons or alkenyl having 2 to 4 carbons or alkoxy having 1 to 4 carbons or hydroxyl or halogen].

4. A molecular compound containing, as a constituent, a phenol derivative represented by Formula (VI)



[wherein R_{33} is



(wherein Y and Z are alkyl having 1 to 6 carbons, alkenyl having 2 to 6 carbons, cyclohexyl which may have alkyl having 1 to 4 carbons or alkenyl having 2 to 4 carbons or alkoxy having 1 to 4 carbons or hydroxyl or halogen, cyclopentyl which may have alkyl having 1 to 4 carbons or alkenyl having 2 to 4 carbons or alkoxy having 1 to 4 carbons or hydroxyl or halogen, phenyl which may have alkyl having 1 to 4 carbons or alkenyl having 2 to 4 carbons or alkoxy having 1 to 4 carbons or halogen, benzyl which may have alkyl having 1 to 4 carbons or alkenyl having 2 to 4 carbons or alkoxy having 1 to 4 carbons or hydroxyl or halogen, phenethyl which may have alkyl having 1 to 4 carbons or alkenyl having 2 to 4 carbons or alkoxy having 1 to 4 carbons or hydroxyl or halogen, α -methylbenzyl which may have alkyl having 1 to 4 carbons or alkenyl having 2 to 4 carbons or alkoxy having 1 to 4 carbons or hydroxyl or halogen, or naphthyl which may have alkyl having 1 to 4 carbons or alkenyl having 2 to 4 carbons or alkoxy having 1 to 4 carbons or hydroxyl or halogen), and R_{34} , R_{35} , R_{36} and

R_{37} are, same or different, hydrogen, alkyl having 1 to 4 carbons, alkenyl having 2 to 4 carbons, alkoxy having 1 to 4 carbons, hydroxyl, halogen or the same groups as those for R_{33}].

5. A molecular compound according to Claims 1 to 4, in which the molecular compound is a clathrate compound.

6. A molecular compound according to Claims 1 to 5, in which the molecular compound contains, as constituents, a phenol derivative of Formula (I), (IV), (V) or (VI) and antibacterial agents, antifungal agents, insecticides, noxious insect repellants, perfumes, deodorants, antifouling agents, curing agents and accelerators for coating materials, resins and adhesives, natural essential oils, antioxidants, vulcanization accelerators or organic solvents, that react with the said phenol derivative to form a molecular compound.

7. A process for producing a molecular compound according to Claims 1 to 6, in which a phenol derivative of Formula (I), (IV), (V) or (VI) is reacted with constituent compounds that react with the said phenol compound to form a molecular compound.

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